

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-6, 8-11, 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the combination of the mask surrounding the second collimating element and the mask preventing molecules of a target material from without being through the second collimating element is not supported by the specification. In the specification a mask is described in the first embodiment at paragraph 0026 and in Fig. 2. In Fig. 2 mask 220 surrounds the second collimating element but does not prevent molecules of a target material from passing through the second collimating element. In Applicant's second embodiment at paragraph 0029 a mask is described but not shown in a figure that prevents molecules of the target material from depositing on the object 410 (i.e. substrate) and molecules of the target material without being through (i.e. passing through) the second collimating element 420b.

“In addition, the adjustable collimator 406 can further comprise a mask (not shown) covering the portion of the adjustable main body 412 below the first

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collimating element 420a to prevent the molecules of the target material from directly going to the object 410 and without being through the second collimating element 420b."

The mask of Applicant's second embodiment does not surround the second collimator. It appears that the applicant is trying to combine two mask embodiments into a single mask embodiment which is not supported by the specification.

Claims 1, 3-6, 8-11, 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-6, 8-11, 13-15 are indefinite because the phrase "so as to prevent molecules of a target material from without being through the second collimating element". Does this mean that the molecules of the target material do not pass through the second collimating element? The confusion lies in the phrase "from without being through".

Response to Arguments

Applicant's arguments filed July 8, 2008 have been fully considered but they are not persuasive.

New 35 U.S.C. 1st and 2nd paragraph rejections have been made based on Applicant's amendments. The Examiner awaits remarks on these rejections.

The arguments will be addressed considering the previous applied prior art against the non-amended claims.

In response to the argument that Jang's bellows are not an adjuster, it is argued that the bellows adjust the distance between the target and the substrate and therefore also adjusts a distance between the collimating means in the form of shields. (See Jang of record)

In response to the argument that Jang's shields do not have a collimating function, it is argued that the shields in Jang eliminate at least some sputtering molecules that are not vertical or perpendicular to the substrate and therefore serve a collimating function. The collimators of applicant's claims are open to a collimating element that has only one hole. (see Jang of record)

In response to the argument that Sawada does not teach a mask that can prevent molecules of the target material from directly going to the object and without being through the second collimating element, it is agreed that Sawada do not teach a mask that prevents molecules from passing through the second collimator. (See Sawada of record)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M-Th with every Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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October 16, 2008